



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION:	CF6-80C2B1	BYPASS RATIO:	5.1
UNIQUE ID NUMBER:	2GE041	PRESSURE RATIO ( $\pi_{c0}$ ):	29.5
COMBUSTOR:	1862M39		
ENGINE TYPE:	TF	RATED THRUST ( $F_{00}$ ) (kN):	249.0

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	2.9	30.6	47.3	7.9
AS % OF ORIGINAL LIMIT	14.9	25.9	47.8	42.6
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			59.7	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			71.5	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			81.2	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			95.6	

### DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 - DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	2.340	0.05	0.04	24.93	6.7
CLIMB OUT	85	2.2	1.922	0.05	0.04	19.68	4.2
APPROACH	30	4.0	0.630	0.12	2.18	12.32	0.0
IDLE	7	26.0	0.197	1.71	20.62	4.60	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			811	561	6681	10719	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				2.3	26.9	43.1	6.7
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.2	1.2	0.3	0.5
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				2.12-2.65	25.9-28.6	42.7-43.3	6.3-7.5

### ACCESSORY LOADS

POWER EXTRACTION	0	(kW)	AT	-	POWER SETTINGS
STAGE BLEED	0	(% CORE FLOW)	AT	-	POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.6-98.2
TEMPERATURE (K)	279-293
ABS HUMIDITY (kg/kg)	0.00457-0.00743

### FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company  
 TEST ORGANIZATION: CF6 Eval Engineering  
 TEST LOCATION: Site IIIB, PTO Peebles  
 TEST DATES: 13/01/1995-17/01/1995

### REMARKS

1. Ref GE report TM95-17.
2. Engine S/N 704/233 & 704/234
3. 1862M39 combustor

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)